



University of Pennsylvania  
**ScholarlyCommons**

---

Departmental Papers (Architecture)

Department of Architecture

---

1-11-2000

# After Typology: The Suffering of Diagrams

William Braham

University of Pennsylvania, [wbraham@design.upenn.edu](mailto:wbraham@design.upenn.edu)

Follow this and additional works at: [http://repository.upenn.edu/arch\\_papers](http://repository.upenn.edu/arch_papers)



Part of the [Architecture Commons](#)

---

## Recommended Citation

Braham, William, "After Typology: The Suffering of Diagrams" (2000). *Departmental Papers (Architecture)*. 24.  
[http://repository.upenn.edu/arch\\_papers/24](http://repository.upenn.edu/arch_papers/24)

This paper is posted at ScholarlyCommons. [http://repository.upenn.edu/arch\\_papers/24](http://repository.upenn.edu/arch_papers/24)  
For more information, please contact [libraryrepository@pobox.upenn.edu](mailto:libraryrepository@pobox.upenn.edu).

---

# After Typology: The Suffering of Diagrams

## **Abstract**

Architects produce diagrams, not buildings, but diagrams that are wholly immanent, wholly embedded and coextensive with the materials, configurations, and forms of buildings. Theories of representation and expression have tended to privilege the concept over the building, treating the artifact as a site of interpretation, a mere extension of the process of its production. But if such concepts could be adequately expressed or understood separately from their manifestations, then the buildings themselves would be unnecessary. Architectural concepts only exist fully in their realization, as discoveries through the non-linear process called design. That condition of immanence inspires the recurring attention to method and process in the architectural discourse and equally the frustration with the embedded quality of the theorizing that it reveals.

## **Disciplines**

Architecture

## AFTER TYPOLOGY: THE SUFFERING OF DIAGRAMS

William W. Braham

January 11, 2000

The diagrammatic or abstract machine does not function to represent, even something real, but rather constructs a real that is yet to come, a new type of reality.

Deleuze and Guattari, *A Thousand Plateaus*<sup>1</sup>

The word 'Type' presents less the image of a thing to copy or imitate completely than the idea of an element which ought itself to serve as the rule for a model.

Quatrèmere de Quincy, *Type*<sup>2</sup>

Architects produce diagrams, not buildings, but diagrams that are wholly immanent, wholly embedded and coextensive with the materials, configurations, and forms of buildings. Theories of representation and expression have tended to privilege the concept over the building, treating the artifact as a site of interpretation, a mere extension of the process of its production. But if such concepts could be adequately expressed or understood separately from their manifestations, then the buildings themselves would be unnecessary. Architectural concepts only exist fully in their realization, as discoveries through the non-linear process called design. That condition of immanence inspires the recurring attention to method and process in the architectural discourse and equally the frustration with the embedded quality of the theorizing that it reveals.

Questions about design processes suggest that the privileging or domination of the artifact must be overturned. But concepts and buildings cannot simply be made equal or similar. Even when architectural production is wrested from its normative modes, there remains an inherent and productive dissymmetry between processes and products, between concepts and their embodiment. Like partners, predators, and symbiotes, each changes and responds to the other. If we are to examine architectural design processes, and we are by no means the first generation of architects to do so, it is that co-formation that we should inspect. The diagramming of diagrams.

Since the late eighteenth century, building typology has provided the dominant model of an architectural working method, even though architects have rarely been able to maintain any kind of useful distinction between typologies of function (the museum, church, or house) and typologies of form (the pyramid, atrium, or basilica). Examples of the dynamic interchange between the typologies of form and function constitute the rule—appropriation of the basilica by the church and of the atrium by the office building—rather than the exception. Moreover, catalogues of building typologies, such as Pevsner's *History of Building Types*, are so evidently bound to particular conventions, cultures, and forms of practice that it is remarkable that the abstract concept retains any currency whatsoever.<sup>3</sup> And yet typology persists, particularly because of its promise as a generative tool, as a means of rationally conceiving new

building forms, even though each effort to codify it as a working method calls the understanding of type into question. From French geometric methods, rigorously documented by Durand in the early nineteenth century, to the diagrams of function and structure that came to characterize (though never to fully define) the historical avant-garde, each development extended the catalogue of typical elements that could be considered.<sup>4</sup> Le Corbusier's structural Dom-ino of 1914 and Hannes Meyer's "Plan calculates itself from the following factors," of 1930 both held out the promise of an infinitely variable generative method grounded in factors newly made visible and declared typical.<sup>5</sup>

The last serious discussion of architectural typology occurred in the mid-1980s when theorists and practitioners of the postmodern claimed it as a method for restoring historical continuity in the city and more astute critics attacked that appropriation as a zealous oversimplification of a more contentious set of practices.<sup>6</sup> The postmodern adoption of typology entirely missed the subtle relation between building type and urban morphology that figured largely in the Italian debate about typology of the 1960s. It also blurred the distinction between regulating type and model-to-be-copied made by the Neoclassical theorist Quatremère de Quincy in the early nineteenth century. Quatremère's distinction had been introduced into the Italian debate in 1962 by Giulio Carlo Argan, who sought to examine the interaction between the "architect's working processes" and their historical conditions, concluding that "when a 'type' is determined in the practice or theory of architecture, it already has an existence as an answer to a complex of ideological, religious or practical demands which arise in a given historical condition."<sup>7</sup> Argan's historical focus limited his examination to stable and well-defined types in specific historical contexts, excluding for example "something as neutral as the structural grid." Like the Van de Velde-Muthesius debate that enlivened the *Deutsche Werkbund* before the First World War, the discussion of typology seems to reduce to the contest between standardization and artistic freedom to invent, between type as a fixed historical configuration and as generative idea.<sup>8</sup>

But even in his effort to regulate "caprice and chance," Quatremère had understood that types were elaborated by "all the degrees of moral imitation, imitation by analogy, by intellectual relationships, by application of principles, by appropriation of manners (styles), combinations, reasons, systems, etc."<sup>9</sup> Argan, too, identified the salient property of type as that agent "which contains the possibility of infinite formal variation."<sup>10</sup> The postmodern production of buildings that either imitated historical models or their geometric abstractions could not have missed the generative potential of typology more completely. It is in the figures now examined under the heading of diagrams—"the nine square grid and the panopticon, the dom-ino and the skyscraper, the face/vase and duck/shed, the paranoid-critical diagram and the fold, dance notation and cinematic storyboards, maternal bodies and bachelor machines"—that the issues previously discussed as typology reemerge in such a productive fashion.<sup>11</sup> The conditions of the discussion have changed, not just with the passing of postmodernism, but with the confluence of Deleuzian notions about the diagram and animated, parametric modeling made possible by the new forms of digital media. The shift from the mechanistic

and idealistic concept of type to that of dynamic diagrams has yielded projects that directly connect the rapidly changing conditions of the city to the generation of architectural form.

But the animate work of the neo-avant-garde has barely touched normative practice, where static functional diagrams are still covered by decorative veneers. Under the influence of postmodernism, the emphasis in most practices shifted to the historical continuity of those veneers, whether their details are traditional or modern. Modern and neo-modern practices also continue to stress examination of the functions from which the decorated diagrams are constructed, but the discussion of method remains polarized as it has been for nearly a century: regulation versus invention, tradition versus modern. Why have the new dynamic processes had so little influence outside academic circles? Certainly the dictates of production within busy commercial practices leaves little room for conceptual experimentation. So too, the longstanding emphasis on final building forms and images, evident in popular and trade publications alike, precludes most serious discussion of design methods within professional circles. Most limiting, however, are the general expectations of methods themselves, that a better design method should somehow relieve the practitioner of decisions and interpretations, making design easier and more efficient. That idea has directed the development of most commercial architectural software, which aspires to lighten the burden of design, while the methods of the neo-avant-garde promise quite the opposite: intensifying the interpretive demands on the architect by connecting the building-as-diagram to ever more complex conditions and requirements. The real breakthrough in computer modeling comes not with the mechanization of well-defined procedures, but with the power to adequately show the results of dynamic non-linear influences. In this context, non-linear means that the influences of a particular design situation cannot be simply predicted or characterized, but only experienced or shown as a total result, either because the situation is sufficiently dynamic or the influences are too numerous and complex in their interaction.

The desire to understand non-linear interactions in architecture is not new. As early as 1934, Lewis Mumford detected the end of mechanistic thinking and forecast the rise of an organic ideology: "Form, pattern, configuration, organism, historical filiation, ecological relationship are concepts that work up and down the ladder of the sciences: the esthetic structure and the social relations are as real as the primary physical quantities that the sciences were once content to isolate."<sup>12</sup> Siegfried Giedion also hailed the "ending of mechanistic conceptions," spotting evidence of the new paradigm in quantum physics, *Gestalt* psychology, physiology, and, of course, the arts after Cubism.<sup>13</sup> What Mumford and Giedion imagined were more sensitive and flexible design methods, capable of ameliorating the excesses of nineteenth century industrialization. The radical implications perceived by Frederick Kiesler in 1939 followed from the extreme results already recognized in quantum physics: "What we call 'forms,' whether they are natural or artificial, are only the visible trading posts of integrating and disintegrating forces mutating at low rates of speed."<sup>14</sup> But do dynamic systems models really guarantee the end of instrumental thinking? Only if their consequences are fully

accepted, if every element of the equation is understood to be interrelated and changeable, from buildings and their contexts to the designers and their practices as well.

Postmodernism failed in its most clearly articulated goal—the relation to history—precisely because it sought a fixed typology of buildings and imagined that each historically derived type could invoke the institutions and subjectivities in which it had been originally formed. (And what if building forms were so absolutely powerful?) Kiesler sought to avoid the problem of the fixed subject in his theory of Correalism by positing health as the final criteria of an integrated design method, hoping to correct the limitations of a functionalism based on fixed needs. He recognized that as designs change the natural and built environments, those alterations in turn influence their inhabitants, redefining even their most basic needs (what is comfortable?) What more flexible criteria could be employed than health, an everyday measure that in its most general form describes nothing so much as the absence of suffering: healthy body, healthy building, healthy culture.

So while normative architectural practice continues dreaming of easier more objective design methods the hard lesson of neo-avant-garde design processes remains obscured. A wholly organic, flexible, and adaptive method of design ignores the desiring (meaning suffering) subject at its peril. Diagrammatic methods succeed precisely where they relinquish their stronger aspirations, situating the humbled architect (post-postmodernism) as just another variable in the diagramming. Neither the question of desire nor that of suffering can be lightly dismissed, nor can their place in contemporary design processes. Without them we would be no more than “after typology” after all.

## REFERENCES

---

<sup>1</sup> Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, University of Minnesota Press (Minneapolis), 1987, p142.

<sup>2</sup> Antoine-Chrysostome Quatremère de Quincy, “Type,” in *Encyclopédie Méthodique*, Vol. 3 (Paris), 1825. Translated by Tony Vidler, *Oppositions* 8, Spring, 1977, p148.

<sup>3</sup> Nikolaus Pevsner, *A History of Building Types*, Princeton University Press (Princeton), 1976.

<sup>4</sup> J.N.L. Durand, *Précis des leçons d'architecture données à l'École polytechnique*, Chez l'Auteur (Paris), 1802.

<sup>5</sup> For Hannes Meyer's diagram, see Kalus Herdeg, *The Decorated Diagram: Harvard Architecture and the Failure of the Bauhaus Legacy*, The MIT Press (Cambridge), 1983, p85.

<sup>6</sup> Werner Oechslin, “Premises for the Resumption of the Discussion of Typology,” *Assemblage* 1, 1986. Micha Bandini, “Typology as a Form of Convention,” *AA Files* 6, 1984.

<sup>7</sup> Carlo Giulio Argan, “On the Typology of Architecture,” Translated by Joseph Rykwert, *Architectural Design*, December, 1963, pp564-5.

---

<sup>8</sup> Muthesius/Van de Velde, "Werkbund Theses and Antitheses," *Programs and Manifestoes on 20th-century Architecture*, edited by Ulrich Conrads, The MIT Press (Cambridge), 1970.

<sup>9</sup> Quatremère de Quincy, "Type," p149.

<sup>10</sup> Argan, p565.

<sup>11</sup> Robert Somol, "The Diagrams of Matter," *Diagram Work*, *AVY* 23, 1998, p23.

<sup>12</sup> Lewis Mumford, *Technics and Civilization*, Harcourt Brace & World (New York), 1934, p370.

<sup>13</sup> Siegfried Giedion, *Mechanization Takes Command: A Contribution to Anonymous History*, W.W. Norton & Company (New York), 1948, p712.

<sup>14</sup> Kiesler, "On Correalism and Biotechnique," p60.